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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/303,802	04/30/1999	C. DAVID YOUNG	97CR159/KE	8875

7590 04/10/2002

ATTENTION KYLE EPPELE M/S 124-323
ROCKWELL COLLINS INC
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EXAMINER

ODLAND, DAVID E

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 04/10/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

[Handwritten signature]

Office Action Summary	Application No.	Applicant(s)	
	09/303,802	YOUNG ET AL.	
	Examiner	Art Unit	
	David Odland	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

1. Claims 5 and 18 are objected to because of informalities.

Claim 5 recites the misspelling of the term 'current' as 'current' in line 3.

Claim 18 recites "The communication network of claim 18..." in line 1. The claim is referring to itself; it is noted by the examiner that the '18' should have been a different previous claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1, as best understood rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "...applying clique activation..." in line 7. It is unclear what is meant by 'applying clique activation'.

Claim 2 recites the limitation "...the transceiver nodes within a clique..." in line 1. It is unclear what defines a group of transceivers as a clique.

Claim 3 recites the limitation "...calculating the cliques for the network transceiver nodes..." in line 2. It is unclear what is meant by 'calculating the cliques'.

Claim 5 recites the limitation "...adding a member of all the current clique members..." in lines 3 and 4. It is unclear what is meant by 'adding a member of all the current clique members'.

Claims 2-5 are rejected because they are dependent upon claim 1.

Claims 4 and 5 are also rejected because they are dependent upon claim 3.

Claim 6 recites the limitation "...measuring the qualities of each neighboring node..." in line 7. It is unclear what 'qualities' are measured.

Claim 6 also recites the limitation, "...calculating cliques..." in line 9. It is unclear what is meant by 'calculating cliques'.

Claim 7 recites the limitation "...applying link activation to announce and transmit, a specific transmit slot and frequency from a first node to a second node..." in lines 2 and 3. It is clear what is meant by 'applying link activation'. Furthermore it unclear what is meant by 'announce and transmit, a specific transmit slot and frequency'.

Claim 8 recites the limitation "...measured qualities..." in line 3. It is unclear what 'qualities' are measured.

Claim 8 also recites the limitation "...a set of the first node's cliques...a set of the first nodes neighbors cliques..." in line 4 and 5. It is unclear what is meant by 'node's cliques'.

Claim 9 recites the term 'clique' in lines 2-4 and 9. it is unclear what defines a group of nodes as a 'clique'.

Claims 7-9 are also rejected because they depend on claim 6.

Claim 10 recites the limitation "...a clique activation slot assignment protocol..." in line 6. It is unclear what is meant by 'a clique activation slot assignment protocol'.

Claim 11 recites the limitation "...a management slot protocol..." in line 2. It is unclear what is meant by a 'management slot protocol'.

Claim 12 recites the limitation "...adaptive slot handling..." in line 2. It is unclear what is meant by 'adaptive slot handling'.

Claim 13 recites the limitation "...dynamic management slot protocol..." in line 2. It is unclear what is meant by 'dynamic management slot protocol'.

Claim 14 recites the limitation "...the bootstrap slot protocol..." in line 1. There is a lack of antecedent basis for this limitation in the claim.

Claim 14 also recites the limitation "...fixed management slot protocol..." in line 2. It is unclear what is meant by 'fixed management slot protocol'.

Claim 15 recites the limitation "...soft circuit protocol..." in line 2. It is unclear what is meant by 'soft circuit protocol'.

Claim 16 recites the limitation "...hard circuit protocol..." in line 2. It is unclear what is meant by 'hard circuit protocol'.

Claim 17 recites the limitation "...standby slot protocol..." in line 2. It is unclear what is meant by 'standby slot protocol'.

Claim 18 recites the limitation "...speculation slot protocol..." in line 2. It is unclear what is meant by 'speculation slot protocol'.

Claim 19 recites the limitation "...the cliques are calculated..." in line 1. It is unclear what is meant by 'the cliques are calculated'.

Claims 11-19 are rejected because they depend on claim 10.

Double Patenting

3. Claim 1, as best understood, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,719,868. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are mere generic representations of the invention recited in the rejected claims.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent number 5,719,868 to Young.

Referring to claim 1, Young discloses a method for automatically managing the communication channel resources between two transceiver nodes having neighboring transceiver nodes in a network of transceiver nodes (a method for automatically managing the communication channel resources between two nodes having neighboring nodes in a network of transceiver nodes [see column 7 lines 20-22]), wherein each node communicates during specific time slots and uses multiple frequencies on a time multiplex basis (each node communicates during specific time slots and uses multiple frequencies on a time multiplex basis [see column 7 lines 23 and 24]), the method comprised of storing possible communication time slots and frequencies between nodes in the network at each transceiver node (storing a table of possible communication time slots and frequencies between nodes in the network at each node [see column 7 lines 26 and 27]), applying clique activation wherein multiple

transceiver nodes in a clique utilize the same time slot for transmitting (a control packet is transmitted which contains the slot and frequency pairs on which neighboring nodes are transmitting on [see column 7 lines 34-41]).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. U.S. Pat. No. 6314084 to Kahale et al. discloses a transmission system, method and apparatus for scheduling transmission links and determining system stability based on dynamic characteristics of a transmission medium.
- b. U.S. Pat. No. 6310867 to Tat discloses a portable radio telephone and methods of operation.
- c. U.S. Pat. No. 5949760 to Stevens et al. discloses a simultaneous channel access transmission method for a multi-hop communications radio network.
- d. U.S. Pat. No. 5291475 to Bruckert discloses a slot hopped FD/TD/CDMA.
- e. U.S. Pat. No. 5581548 to Ugland et al. discloses an frequency and channel hopping communication in a TDMA cellular mobile radio system.
- f. U.S. Pat. No. 5245609 to Ofek et al. discloses a communication network and a method of regulating the transmission of data packets in a communication network.
- g. U.S. Pat. No. 5134615 to Freeburg et al. discloses a frequency agile TDMA communications system.


- h. U.S. Pat. No. 5038398 to Wills discloses a method of assigning communication links in a dynamic communication network.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland whose telephone number is (703) 305-3231. The examiner can normally be reached on Mon-Fri 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached at (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

deo

April 3, 2002



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600